

030012

2570 OIPE

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/715,418

DATE: 10/19/2001

TIME: 11:25:00

Input Set : A:\09-715,418 sequence listing Attorney docket 10716-12.txt
 Output Set: N:\CRF3\10192001\I715418.raw

3 <110> APPLICANT: CURAGEN CORPORATION
 4 RASTELLI, LUKA
 6 <120> TITLE OF INVENTION: WNT-REGULATED CYTOKINE-LIKE POLYPEPTIDE AND NUCLEIC
 7 ACIDS ENCODING SAME
 9 <130> FILE REFERENCE: 10716/12
 11 <140> CURRENT APPLICATION NUMBER: 09/715,418
 C--> 12 <141> CURRENT FILING DATE: 2000-11-19
 14 <150> PRIOR APPLICATION NUMBER: 60/166,177
 15 <151> PRIOR FILING DATE: 1999-11-18
 17 <160> NUMBER OF SEQ ID NOS: 48
 19 <170> SOFTWARE: PatentIn Ver. 2.1
 21 <210> SEQ ID NO: 1
 22 <211> LENGTH: 212
 23 <212> TYPE: DNA
 24 <213> ORGANISM: Mus sp.
 26 <400> SEQUENCE: 1
 27 gaattcagtg atgtagagag ggccattgag acactcatca agaacttcca taaatactct 60
 28 gtggcgggta aaaaggaaac actgacctt gctgagcttc gagacctggt taccacagcag 120
 29 ctgccacacc tcatgccgag caactgtggg ttagaagaga aaattgccaa cctgggcaac 180
 30 tgtaatgact cgaaactgga gtttgggaagc tt 212
 33 <210> SEQ ID NO: 2
 34 <211> LENGTH: 1670
 35 <212> TYPE: DNA
 36 <213> ORGANISM: Mus sp.
 38 <220> FEATURE:
 39 <221> NAME/KEY: modified_base
 40 <222> LOCATION: (1541)
 41 <223> OTHER INFORMATION: "n" represents a, t, c, g, other or unknown
 43 <400> SEQUENCE: 2
 44 tcaggtgagc tggctcctcc atcctgtctc ccagctgcc a gcaggtctcc cctcctctca 60
 45 ggtagatcat gatccatcag ctccctgtggg gcaggtcata ggacagacga caaaactcaa 120
 46 ctccacagaag gaaggaccag tgtaccagga acgatgggac agtgtcggtc agccaatgct 180
 47 gaggatgccc aagaattcag tgatgtagag agggccattg agacactcat caagaacttc 240
 48 cataaatact ctgtggcggg taaaaaggaa aactgacct ctgctgagct tcgagacctg 300
 49 gttacccagc agctgccaca cctcatgccg agcaactgtg ggtagaaga gaaaattgcc 360
 50 aacctgggca actgtaatga ctcgaaactg gagtttgaa gcttctggga gttgattgga 420
 51 gaagcagcca agagtgtgaa gatggagagg cctgttactc ggagctgagg acttctactt 480
 52 ggaacttggt ggggggtgtt gggatagggg agtttttagag gcaactggaa taaaaccctc 540
 53 aatgccccacc acccccttcc ccagcctgca cctcctctca ttgctgcaat gttcacgttc 600
 54 aggacagget tccctgtggg ctccatggag ctccctgggtc cagaagtcct catctcaagg 660
 55 gagctcaggg ggtgggtgtt ggctggagag gatctgcagg gatcctggaa gggttaagggc 720
 56 caagcaattt ggtagtaggg gaagggcaga aaggaactgg gttatggaag tgatccaaaag 780
 57 agcagggatg ggaatctggc tgcataattt gtccctgaaa ggggtgtctga gaacctaccc 840
 58 ccttctaatac ttgtcccacc taaactgtag ttgtctgccc tgtgctatcc ttgctgcttc 900
 59 cagctctgcc ccatcctcct tccagtgtot gttcctgagt aggggcaggg gaaataggag 960
 60 cagagttgca aaagaggetg agggaggcat gacttcatca ctttgggggtg agaggaccag 1020
 61 ctagatgctt gggcatttat ggtagttatt ttatatcatt tgattaataa aaatattgga 1080

ENTERED

RAW SEQUENCE LISTING

DATE: 10/19/2001

PATENT APPLICATION: US/09/715,418

TIME: 11:25:00

Input Set : A:\09-715,418 sequence listing Attorney docket 10716-12.txt

Output Set: N:\CRF3\10192001\I715418.raw

```

62 aaatgtaaag aaaaaaaaaaag aaaaaaacat ggggcccgaac ccttatcccc cttgagtagg 1140
63 gtgatatttt gcgtgtgcaa tgggcggcct gttttcgaga ggcggtgaca tggggaaaac 1200
64 atgggggtgt accaaacctt aaccgccttt taggggaaac accccttttg ccgcaagtgg 1260
65 gttaataacg gaagaagccc ggcgcgattg cccttcacaa gagtctcccg cggtagatgc 1320
66 ggatgggaca gcccccttcg gcgcggttta ggcgcgcgtg tgtgtggttt ctacgcgaat 1380
67 agggataaat attgtggcgg cgcgcaggga gtgtgtgtgt tgcgcgcctg cttctgtgga 1440
68 ggtggtgtgt cccaaaaact aaaagggcc tttgtgcgc gttagtttgc tctagcagag 1500
W--> 69 tccgctgcac atattttggt gggcgtgtcc gtgccgccc ngytggtgct tgttgcctggc 1560
70 gtggcgtggg gtgggtgtgg ttgcgggggt ggtcgtgttg ggtgtgtgag tgcgcgcggg 1620
71 ggccgtgtgt gtgtgtggtt gcatgataag gttagagtga gtgagagcgg 1670
74 <210> SEQ ID NO: 3
75 <211> LENGTH: 131
76 <212> TYPE: PRT
77 <213> ORGANISM: Mus sp.
79 <400> SEQUENCE: 3
80 Ser Ile Ser Ser Cys Gly Ala Gly Tyr Arg Thr Asp Asp Lys Thr Gln
81 1 5 10 15
83 Leu Thr Glu Gly Arg Thr Ser Val Pro Gly Thr Met Gly Gln Cys Arg
84 20 25 30
86 Ser Ala Asn Ala Glu Asp Ala Gln Glu Phe Ser Asp Val Glu Arg Ala
87 35 40 45
89 Ile Glu Thr Leu Ile Lys Asn Phe His Lys Tyr Ser Val Ala Gly Lys
90 50 55 60
92 Lys Glu Thr Leu Thr Pro Ala Glu Leu Arg Asp Leu Val Thr Gln Gln
93 65 70 75 80
95 Leu Pro His Leu Met Pro Ser Asn Cys Gly Leu Glu Glu Lys Ile Ala
96 85 90 95
98 Asn Leu Gly Asn Cys Asn Asp Ser Lys Leu Glu Phe Gly Ser Phe Trp
99 100 105 110
101 Glu Leu Ile Gly Glu Ala Ala Lys Ser Val Lys Met Glu Arg Pro Val
102 115 120 125
104 Thr Arg Ser
105 130
108 <210> SEQ ID NO: 4
109 <211> LENGTH: 357
110 <212> TYPE: DNA
111 <213> ORGANISM: Homo sapiens
113 <220> FEATURE:
114 <221> NAME/KEY: modified_base
115 <222> LOCATION: (231)
116 <223> OTHER INFORMATION: "n" represents a, t, c, g, other or unknown
118 <220> FEATURE:
119 <221> NAME/KEY: modified_base
120 <222> LOCATION: (337)
121 <223> OTHER INFORMATION: "n" represents a, t, c, g, other or unknown
123 <400> SEQUENCE: 4
124 ataggacaac agaactctca ccaaaggacc agacacagtg agcaccatgg gacagtgtcg 60
125 gtcagccaac gcagaggatg ctacaggaatt cagtgatgtg gagagggcca ttgagaccct 120
126 catcaagaac tttcaccagt actccgtgga ggggtgggaag gagacgctga ccccttctga 180

```

RAW SEQUENCE LISTING

DATE: 10/19/2001

PATENT APPLICATION: US/09/715,418

TIME: 11:25:00

Input Set : A:\09-715,418 sequence listing Attorney docket 10716-12.txt

Output Set: N:\CRF3\10192001\I715418.raw

```

W--> 127 gctacgggac ctgggtcaccc agcagctgcc ccatctcatg ccgagcaact ntggcctgga 240
      128 agagaaaatt gccaacctgg gcagctgcaa tgactctaaa ctggagttca ggagtttctg 300
W--> 129 ggagctgatt ggagaagcgg ccaagagtgt gaagctngag aggactgtcc gggggca 357
      132 <210> SEQ ID NO: 5
      133 <211> LENGTH: 379
      134 <212> TYPE: DNA
      135 <213> ORGANISM: Homo sapiens
      137 <400> SEQUENCE: 5
      138 gaattccaga gggagtcttc agtccccccg gacaggcctc tccagettca cactcttggc 60
      139 cgcttctcca atcagctccc agaaactcct gaactccagt ttagagtcac tgcagctgcc 120
      140 caggttggca attttctctt ccaggccaca gttgctcggc atgagatggg gcagctgctg 180
      141 ggtgaccagg tcccgtagct cagaaggggt cagcgtctcc tccccacct ccacggagta 240
      142 ctggtgaaag ttcttgatga gggctcfaat ggccctctcc acatcaactga attcctgagc 300
      143 atcctctgcg ttggctgacc gacactgtcc catggtgctc actgtgtctg gtcctttggg 360
      144 gagagttctg ttgtcctat 379
      147 <210> SEQ ID NO: 6
      148 <211> LENGTH: 118
      149 <212> TYPE: PRT
      150 <213> ORGANISM: Homo sapiens
      152 <400> SEQUENCE: 6
      153 Asp Asn Arg Thr Leu Thr Lys Gly Pro Asp Thr Val Ser Thr Met Gly
      154 1 5 10 15
      156 Gln Cys Arg Ser Ala Asn Ala Glu Asp Ala Gln Glu Phe Ser Asp Val
      157 20 25 30
      159 Glu Arg Ala Ile Glu Thr Leu Ile Lys Asn Phe His Gln Tyr Ser Val
      160 35 40 45
      162 Glu Gly Gly Lys Glu Thr Leu Thr Pro Ser Glu Leu Arg Asp Leu Val
      163 50 55 60
      165 Thr Gln Gln Leu Pro His Leu Met Pro Ser Asn Cys Gly Leu Glu Glu
      166 65 70 75 80
      168 Lys Ile Ala Asn Leu Gly Ser Cys Asn Asp Ser Lys Leu Glu Phe Arg
      169 85 90 95
      171 Ser Phe Trp Glu Leu Ile Gly Glu Ala Ala Lys Ser Val Lys Leu Glu
      172 100 105 110
      174 Arg Pro Val Arg Gly His
      175 115
      178 <210> SEQ ID NO: 7
      179 <211> LENGTH: 20
      180 <212> TYPE: DNA
      181 <213> ORGANISM: Artificial Sequence ✓
      183 <220> FEATURE:
      184 <223> OTHER INFORMATION: Description of Artificial Sequence: Primer
      186 <400> SEQUENCE: 7
      187 cttgatgagg gtctcaatgg 20
      190 <210> SEQ ID NO: 8
      191 <211> LENGTH: 26
      192 <212> TYPE: DNA
      193 <213> ORGANISM: Artificial Sequence ✓
      195 <220> FEATURE:

```

RAW SEQUENCE LISTING

DATE: 10/19/2001

PATENT APPLICATION: US/09/715,418

TIME: 11:25:00

Input Set : A:\09-715,418 sequence listing Attorney docket 10716-12.txt

Output Set: N:\CRF3\10192001\I715418.raw

```

196 <223> OTHER INFORMATION: Description of Artificial Sequence: Probe ✓
198 <400> SEQUENCE: 8
199 ccacatcact gaattcctga gcatcc 26
202 <210> SEQ ID NO: 9
203 <211> LENGTH: 20
204 <212> TYPE: DNA
205 <213> ORGANISM: Artificial Sequence ✓
207 <220> FEATURE:
208 <223> OTHER INFORMATION: Description of Artificial Sequence: Primer ✓
210 <400> SEQUENCE: 9
211 cagacacagt gagcaccatg 20
214 <210> SEQ ID NO: 10
215 <211> LENGTH: 98
216 <212> TYPE: PRT
217 <213> ORGANISM: Homo sapiens
219 <400> SEQUENCE: 10
220 Met Ala Ala Glu Pro Leu Thr Glu Leu Glu Glu Ser Ile Glu Thr Val
221 1 5 10 15
223 Val Thr Thr Phe Phe Thr Phe Ala Arg Gln Glu Gly Arg Lys Asp Ser
224 20 25 30
226 Leu Ser Val Asn Glu Phe Lys Glu Leu Val Thr Gln Gln Leu Pro His
227 35 40 45
229 Leu Leu Lys Asp Val Gly Ser Leu Asp Glu Lys Met Lys Ser Leu Asp
230 50 55 60
232 Val Asn Gln Asp Ser Glu Leu Lys Phe Asn Glu Tyr Trp Arg Leu Ile
233 65 70 75 80
235 Gly Glu Leu Ala Lys Glu Ile Arg Lys Lys Lys Asp Leu Lys Ile Arg
236 85 90 95
238 Lys Lys
242 <210> SEQ ID NO: 11
243 <211> LENGTH: 110
244 <212> TYPE: PRT
245 <213> ORGANISM: Homo sapiens
247 <400> SEQUENCE: 11
248 Met Ser Gln Leu Glu Arg Asn Ile Glu Thr Ile Ile Asn Thr Phe His
249 1 5 10 15
251 Gln Tyr Ser Val Lys Leu Gly His Pro Asp Thr Leu Asn Gln Gly Glu
252 20 25 30
254 Phe Lys Glu Leu Val Arg Lys Asp Leu Gln Asn Phe Leu Lys Lys Glu
255 35 40 45
257 Asn Lys Asn Glu Lys Val Ile Glu His Ile Met Glu Asp Leu Asp Thr
258 50 55 60
260 Asn Ala Asp Lys Gln Leu Ser Phe Glu Glu Phe Ile Met Leu Met Ala
261 65 70 75 80
263 Arg Leu Thr Trp Ala Ser His Glu Lys Met His Glu Gly Asp Glu Gly
264 85 90 95
266 Pro Gly His His His Lys Pro Gly Leu Gly Glu Gly Thr Pro
267 100 105 110
270 <210> SEQ ID NO: 12

```

RAW SEQUENCE LISTING

DATE: 10/19/2001

PATENT APPLICATION: US/09/715,418

TIME: 11:25:00

Input Set : A:\09-715,418 sequence listing Attorney docket 10716-12.txt

Output Set: N:\CRF3\10192001\I715418.raw

```

271 <211> LENGTH: 37
272 <212> TYPE: PRT
273 <213> ORGANISM: Unknown Organism ✓
275 <220> FEATURE:
276 <223> OTHER INFORMATION: Description of Unknown Organism: 3-100/ICaBP type ✓
277     calcium binding protein
279 <400> SEQUENCE: 12
280 Ser Asn Cys Gly Leu Glu Lys Ile Ala Asn Leu Gly Ser Cys Asn
281   1             5             10             15
283 Asp Ser Lys Leu Glu Phe Arg Ser Phe Trp Glu Leu Ile Gly Glu Ala
284             20             25             30
286 Ala Lys Ser Val Lys
287             35
290 <210> SEQ ID NO: 13
291 <211> LENGTH: 37
292 <212> TYPE: PRT
293 <213> ORGANISM: Unknown Organism ✓
295 <220> FEATURE:
296 <223> OTHER INFORMATION: Description of Unknown Organism: 3-100/ICaBP type ✓
297     calcium binding protein
299 <400> SEQUENCE: 13
300 Asp Val Glu Arg Ala Ile Glu Thr Leu Ile Lys Asn Phe His Gln Tyr
301   1             5             10             15
303 Ser Val Glu Gly Gly Lys Glu Thr Leu Thr Pro Ser Glu Leu Arg Asp
304             20             25             30
306 Leu Val Thr Gln Gln
307             35
310 <210> SEQ ID NO: 14
311 <211> LENGTH: 19
312 <212> TYPE: PRT
313 <213> ORGANISM: Unknown Organism ✓
315 <220> FEATURE:
316 <223> OTHER INFORMATION: Description of Unknown Organism: Bacterial type II ✓
317     secretion system protein F
319 <400> SEQUENCE: 14
320 Val Thr Gln Gln Leu Pro His Leu Met Pro Ser Asn Cys Gly Leu Glu
321   1             5             10             15
323 Glu Lys Ile
327 <210> SEQ ID NO: 15
328 <211> LENGTH: 10
329 <212> TYPE: PRT
330 <213> ORGANISM: Unknown Organism ✓
332 <220> FEATURE:
333 <223> OTHER INFORMATION: Description of Unknown Organism: Ubiquitin ✓
334     carboxyl-terminal hydrolases family
336 <400> SEQUENCE: 15
337 Ala Asn Ala Glu Asp Ala Gln Glu Phe Ser
338   1             5             10
341 <210> SEQ ID NO: 16

```

VERIFICATION SUMMARY

DATE: 10/19/2001

PATENT APPLICATION: US/09/715,418

TIME: 11:25:01

Input Set : A:\09-715,418 sequence listing Attorney docket 10716-12.txt

Output Set: N:\CRF3\10192001\I715418.raw

L:12 M:271 C: Current Filing Date differs, Replaced Current Filing Date

L:69 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2

L:127 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4

L:129 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4